

HP ProLiant ML310 Generation 2 Cabling Matrix

This matrix provides information on cables required to connect internal and external options.

The ML310 G2 includes a single SCSI or SATA cable for the connection of the system hard drives. To use a second SCSI channel for tape backup, drive duplexing, or connection of external SCSI devices; a second SCSI cable is required on some models.

Use this matrix to identify any additional cables that may be required.

Cable included with the ML310G2 model:	
Non-hot-plug SCSI model (five drop)	148785-007
Hot-plug SCSI model (point to point)	302377-001
Non-hot-plug SATA model (SATA fan out)	384735-001
Hot-plug SATA model (point to point, SAS ready)	361316-009

Option	SCSI Connector on the Option	Cable Type Included with the Option	Supported HBAs/Controllers	Additional Cables Required
Internal Non Hot Plug Hard Drives				
SATA non-hot-plug drive	N/A	No SATA cable included with the option	The non-hot-plug drive cage can be connected to one of the following: Integrated SATA host controller (SATA Models)	No additional cables required
Ultra320 Non-HotPlug Hard Drives	LVD Wide 68 pin	No SCSI Cable included with the option	The non-hot plug drive cage can be connected to one of the following: Slot-based Ultra320 SCSI Controller (Non-Hot Plug SCSI models) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21) Smart Array 641, 642, 6402, or 6404 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
Internal Optical Storage				
DRV, CD,48X		UDMA cable	N/A	No additional cables required
DVD-ROM/CD-RW, 48X Combo	N/A	18-in UDMA cable	N/A	No additional cables required
DVD-ROM/CD-RW, 48X Combo refresh	N/A	18-in UDMA cable	N/A	No additional cables required
Internal Tape				
Tape 24i	LVD Narrow 50-pin	50-to-68 pin adapter and HD68+HD68 cable	Slot-based Ultra320 SCSI Controller (Non-Hot Plug SCSI models) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
DAT 40i DAT 72i Ultrium 215i Ultrium 230i Ultrium 460i DLT VS 80i SDLT 320i	LVD wide 68 pin	HD 68- HD68	Slot-based Ultra320 SCSI Controller (Non-Hot Plug SCSI models) 64-Bit/133-Hz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21)	No additional cables required
External Tape Drives				
Tape 24e	LVD Narrow 50-pin	50-to-68 pin adapter and HD68+HD68 cable	Slot-based Ultra320 SCSI Controller (SCSI models) 64-Bit/133-Hz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21)	Order the HD68 internal-to-external kit (P/N 159547-B22) No additional cables required
DAT 40e DAT 72e Ultrium 215e Ultrium 230e Ultrium 460e DLT VS 80e SDLT 320e	LVD wide 68 pin	HD68-VHDCI	Slot-based Ultra320 SCSI Controller (SCSI models) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21)	Order the VHDCI internal-to-external kit (P/N 333370-B21) No additional cables required
External Tape Autoloaders				
1/8 Ultrium 230 1/8 Ultrium 460 1/8 DLT VS 80 SSL1016 Ultrium 230 SSL1016 Ultrium 460 SSL1016 DLT1 DAT 40x6 DAT 72x6	LVD Wide 68-pin	HD68-VHDCI 1.5 m	Slot-based Ultra320 SCSI Controller (Non Hot Plug SCSI models) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21)	Order the VHDCI internal-to-external kit (P/N 333370-B21) No additional cables required
External Tape Libraries				
MSL6030 MSL6060 MSL5026S2 MSL5052S2 MSL5030 MSL5060 ESL9595 ESL9000	VHDCI	No SCSI cable included	Slot-based Ultra320 SCSI Controller (Non Hot Plug SCSI models) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21)	Order the VHDCI internal-to-external kit (P/N 333370-B21) and one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21) Order one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21)
Optical Jukeboxes				
9100mx 220mx 30ux 700ux 1100ux	VHDCI	No SCSI cable included	Slot-based Ultra320 SCSI Controller (Non Hot Plug SCSI models) 64-Bit/133-MHz Dual-Channel Ultra320 (P/N 268351-B21) 64-Bit/66-MHz Dual-Channel Wide Ultra 3 (P/N 284688-B21) 64-Bit/133-MHz Single-Channel Ultra320 SCSI HBA G2 (P/N 374654-B21)	Order the VHDCI internal-to-external kit (P/N 333370-B21) and one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21) Order one of the following VHDCI-VHDCI cables: VHDCI-VHDCI cable. 6 ft (P/N 341174-B21) VHDCI-VHDCI cable. 12 ft (P/N 341175-B21)
Diskette Drives				
FDD 1.44 Option	N/A	34 pin diskette cable included in option kit		No additional cables required
USB Diskette Drive	N/A	USB		No additional cables required
USB 1.44-MB External Diskette Drive	N/A	USB		No additional cables required
NOTE: The information in this chart lists whether or not additional cables need to be purchased with each controller-to-option configuration. For information on how to cable an option, refer to the HP ProLiant ML310 Generation 2 User Guide and the device-specific documentation. For information on the specific options supported by the server, refer to the server and device QuickSpecs.				